

### THE UNITED STATES OF AMERICA

TO AND TO WHOM THESE: PRESENTS SHADD, COMES

# AXII Technology Holding Company, TIG

There has been presented to the

### Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY STARS FROM THE DATE OF THIS GRAND, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLEMISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE OUT OF EXCLUDE OTHERS FROM SELLING THE YARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR ORTHING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT BY THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

COTTON

#### '06CX924BR'

In Costimon Macros, I have hereunto set my hand and caused the seal of the Hunt Haristy Arcticism Office to be affixed at the City of Washington, D.C. this twenty-ninth day of September, in the year two thousand and six.

Benjah

Commissioner Plant Variety Protection Office Agricultural Marketing Service Secretary of Agriculture

U.S. DEPARTMENT OF AGRICULTURE

AGRICULTURAL MARKETING SERVICE SCIENCE AND TECHNOLOGY DIVISION - PLANT VARIETY PROTECTION OFFICE

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

The following statements are made in accordance with the Privacy Act of 1974 (5U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

(Instructions and inform	nation collection burden sta	tement on reverse)							
1. NAME OF OWNER				•	2. TEMPORARY D	SIGNATION OF	3. \	VARIETY NAME LALL	4/24/0
D&PL Technology Ho	Iding Company 11 C				EXPERIMENTA	NAME			PEREN
Dai 2 (comology no	iding company, 220				05X4	194BR	1	16CX924BR	, 4/281 -
4. ADDRESS (Street and No., or R.F.D.	No., City, State, and ZIP C	ode, and Country )			5. TELEPHONE (in	clude area code)			
PO Box 157					(662	) 742-4141	PVF	PO NUMBER	
100 Main Street Scott, Mississippi 38	772				6. FAX (include are	a code)	20	05002	75
USA					(662	) 742-3182	FILI	NG DATE	
7. IF THE OWNER IS NOT A "PERSON ORGANIZATION (corporation, partne		8. IF INCORPORATED STATE OF INCORP	-		9. DATE OF INCOF	PORATION		UNE 13, 2	005
Corporation		Delaware				ary 29, 1996	9	Olderation	
10. NAME AND ADDRESS OF OWNER	R REPRESENTATIVE(S) To	O SERVE IN THIS APPL	ICATION.	(First person	listed will receive all p	papers)		FILING AND EXAMINATIO	N
Delta and Pine Land C Kelly Casavechia P.O. Box 157 Scott, MS 38772	Company				·			DATE $6/13/0$ DESTIFICATION FEE:	5
en e ek								0/12/0	ر سیم
11. TELEPHONE (include area code)	12. FAX (include area cod	o)	13. E_MA			<u>"</u>		OATE 4// C/O	<b>D</b>
The receipt of the finance area society	12. 17 or (moldae area sou		15. L	uL			14. ONOT NINE	Common value	
(662) 742-4141	(662) 74	2-3182	keily	/.h.casave	chia@deltaand	oine.com		Cotton	
15. GENUS AND SPECIES NAME OF C		16. FAMILY						RIETY A FIRST GENERAT	ION
Gossypium	<u>hirsutum</u>		Malva	ıcae			HYBRID?	ÆS XNO	
18. CHECK APPROPRIATE BOX FOR E	EACH ATTACHMENT SUB	MITTED (Follow instruct	tions on	19. DOES T	HE OWNER SPECIF	Y THAT SEED C	F THIS VATIET	/ BE SOLD AS A CLASS (	 DF
reverse). a. x Exhibit A. Origin and Breedin	a History of the Variety			CERTIF	ED SEED? (See See	tion 83(a) of the	Plant Variety Pro	tection Act)	
b. X Exhibit B. Statement of Distin	• •				YES (If "yes", answe	items 20	XNO	(If "no", go to item 22)	
c. X Exhibit C. Objective Descript		,			and 21 below)			14.0TCD 40 TO 11.01DED	
d. Exhibit D. Additional Descrip  e. x Exhibit E. Statement of the Ba					ERATIONS?	THA: SEED OF I	HIS VARIETY BE	LIMITED AS TO NUMBER	
f. X Voucher Sample (2,500 viable							,,		
verification that tissue culture repository)	will be deposited and main	tained in an approved p			YES	I CLASSES OF E	NO DI ICTION B	EYOND BREEDER SEED	12
g. X Filing and Examination Fee (\$	32,450), made payable to "7	reasurer of the United		21, 11 (120	101120, 111101				
States" (Mail to the Plant Varie 22. HAS THE VARIETY (INCLUDING AN	· /	L) OB A HYBRID BROD	NICED	l-a-a-a-	FOUNDATION	REGISTE		CERTIFIED ECTED BY INTELLECTUAL	
FROM THIS VARIETY BEEN SOLD, OTHER COUNTRIES?					TY RIGHT (PLANT BR			ECTED ST INTELLECTORE	
YES X					YES	□NO			
IF YES, YOU MUST PROVIDE THE ( FOR EACH COUNTRY AND THE CI				-	GIVE COUNTRY, DA' :NCE NUMBER. (PIE				
<ol> <li>The owners declare that a viable sam for a tuber propagated variety a tissu</li> </ol>							nce with such reg	julations as may be applica	able, or
The undersigned owner(s) is(are) the and is entitled to protection under the				ariety, and b	elieve(s) that the var	ety is new, distir	ct, uniform, and	stable as required in Secti	on 42,
Owner(s) is(are) informed that false	representation herein can jo	eopardize protection and	d result in pe	enalties.					
BIGNATURE OF OWNER			SIGNATUR	RE OF OWN	ER 0//	/			
Ch Jone LIX	ovi		M	elle	· // pt	rii			
NAME (Please print or type)			NAME (Ple	ease print or t	ype)				
Don L. Keim			Willi	am V. H	ugie				
DAPACITY OR TITLE	DATE			OR TITLE				DATE	
Cotton Breeder	つびゃ	e 10, 2005	Vice	Preside	ent/Director o	f Researcl	n	June 10, Ze	205

200500275

GENERAL: To be effectively filed with the Plant Variety Protection Office (PVPO), ALL of the following items must be received in the PVPO: (1) Completed application form signed by the owner; (2) completed exhibits A, B, C, E; (3) for a seed reproduced variety at least 2,500 viable untreated seeds, for a hybrid variety at least 2,500 untreated seeds of each line necessary to reproduce the variety, or for tuber reproduced varieties verification that a viable (in the sense that it will reproduce an entire plant) tissue culture will be deposited and maintained in an approved public repository; (4) check drawn on a U.S. bank for \$2,705 (\$320 filing fee and \$2,385 examination fee), payable to "Treasurer of the United States" (See Section 97.6 of the Regulations and Rules of Practice.) Partial applications will be held in the PVPO for not more than 90 days, then returned to the applicant as unfiled. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 500, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. DO NOT use masking materials to make corrections. If a certificate is allowed, you will be requested to send a check paybable to "Treasurer of the United States" in the amount of \$320 for issuance of the certificates will be issued to owner, not licensee or agent.

Plant Variety Protection Office Telephone: (301) 504-5518 FAX: (301) 504-5291

Homepage: http://www.ams.usda.gov/science/pvpo/pvp.htm

#### ITEM

- 18a. Give:
- (1) the genealogy, including public and commercial varieites, lines, or clones used, and the breeding method
- (2) the details of subsequent stages of selection and multiplication;
- (3) evidence of uniformity and stability; and
- (4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified
- 18b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of realted varieties:
  - (1) Identify these varieties and state all differences objectively;
  - (2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences; and
  - (3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.
- 18c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.
- 18d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 18e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.
- 19. If "Yes" is specified (seed of this variety be sold by variety name only, as a class of certified seed), the applicant MAY NOT reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. (See Regulations and Rules of Practice, Secion 97.103).
- 22. See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.
- 23. See Section 55 of the Act for instructions on claiming the benefit of an earlier filing date.
- 21. CONTINUED FROM FRONT (Please provide a statement as to the limitation and sequence of generations that may be certified.)
- 22. CONTINUED FROM FRONT (Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)
- 23. CONTINUED FROM FRONT (Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)
  Bollgard® with Roundup Ready® cotton

THESE SEEDS ARE COVERED UNDER U. S. PATENTS 5,633,435; 5,500,365; 5,424,200; 5,359,142; 5,352,605; 5,530,196; 5,322,938; 5,196,525; 5,188,642; 5,164,316; 4,940,835; 5,717,084; 5,728,925; and 5,804,425.

NOTES: It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the application/certificate. There is no charge for filling a change of address. The fee for filling a change of ownership or assignment or any modification of owner's name is specified in Section 97.175 of the regulations. (See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of the Regulations and Rules of Practice.)

To avoid conflict with other variety names in use, the applicant must check the appropriate recognized authority. For example, for agricultural and vegetable crops, contact: Seed Branch, AMS, USDA, Room 213, Building 306, Beltsville Agricultural Research Center-East, Beltsville, MD 20705. Telephone: (301) 504-8089. http://www.ams.usda.gov/isg/seed/is-sd.htm

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to repond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this collection of information is (0581-0055). The time required to complete this information is collection is estimated to average 1.4 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

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S&T -470 (04-01) designed by the Plant Variety Protection Office with WordPerfect 6.0a. Replaces STD-470 (02-99) which is obsolete.

#### **EXHIBIT A**

## DELTA AND PINE LAND COMPANY'S APPLICATION FOR 05X494BR '06CX924BR'

#### ORIGIN AND BREEDING HISTORY

#### 1. GENEALOGY

05X494BR is a selection derived from a backcross involving DP5415BR-171 as a donor parent and DP 491 as a recurrent parent. DP5415BR-171 has the Monsanto developed gene from Bacillus thuringiensis (Bt, 531 construct) and the EPSPS gene (1445 construct) that gives tolerance to certain lepidopteron insects and the herbicide glyphosate, respectively.

The F1 and BC1 crosses were made in the field in 1998 at Scott, MS and in Costa Rica, Winter, 1998-99. The BC2 crosses were made and the BC2F1 plants were grown and selfed in the greenhouses at Scott, MS. BC2F2 and BC2F3 plants were grown and selfed in the field in Costa Rica.

BC2F4 progeny rows were grown at Scott, MS in the Summer, 2002. Progeny rows were tested for trueness to the DP 491 plant type and for purity of the 1445 and 531 gene insertions. A single selected line, MS5256[531][1445]-02BC2F3-581, was designated 05X494BR in 2003. Breeder increases were grown in Scott, MS in 2003 and 2004. Foundation increase was planted in Eloy, Az in 2005.

Selection criteria used in the BC2F2 through BC2F5 generations included PCR screening plants for presence and homozygosity of the 1445 and 531 gene insertion. Selection criteria used in the selection of this line in the BC2 F4 and BC2F5 generations included lint percent, fiber quality traits (micronaire, length and strength) and agronomic traits (plant type, plant maturity, plant height and storm resistance).

#### STATEMENT ON UNIFORMITY AND STABILITY

05X494BR has been observed every generation since 2002 and has shown to be uniform and stable. Less than 2% of the plants do not contain both of the gene insertions 1445 and 531.

#### **EXHIBIT B**

# DELTA AND PINE LAND COMPANY'S APPLICATION FOR 05X494BR '06CX924BR'

#### STATEMENT OF DISTINCTNESS

05X494BR is a picker-type upland variety. The picker-type varieties as a group are distinguished from stripper varieties primarily by a more open or loose boll type. The picker-type varieties are distinguished from Acala-type varieties primarily by earlier maturity, higher heat tolerance, shorter fiber length and lower fiber strength.

05X494BR is different from many other picker-type varieties in that its plants possess two transgenes (1445 and 531 gene insertions) developed by the MONSANTO COMPANY. The gene insertion 1445 causes plants to be tolerant to the herbicide ROUNDUP (glyphosate). The gene insertion 531 (commercialized under the trade name Bollgard) enables plants to be tolerant to certain to lepidopteron insects.

DP 488 BG/RR was used as the most similar variety because it has many characteristics in common with 05X494BR. Also, DP 488 BG/RR and 05X494BR were derived from the same backcross. In comparison, 05X494BR differs from DP 488 BG/RR in lint percent and fiber micronaire.

Novelty of 05X494BR is claimed on the following characteristics, for which there are significant differences from the comparison variety, at the 5% level of probability or less.

#### Supporting Tables:

<u>Table</u>	<u>Test</u>	<u>Years</u>	<u>Locations</u>
1	Head to Head Comparisons	2003, 2004	7 tests - Midsouth, Southeast
2	PVP Trial	2004	Scott. Ms
3	PVP Trial Final Plant Map	2004	Scott, Ms

	Explanations:		
Lint Percent =	percentage of the seed cotton that is lint, handpicked samples		
Mic =	micronaire, measure of fiber fineness (high = coarse fiber)		
Len =	fiber length (inches)		
Ur =	uniformity ratio, proportion of uniform length fibers		
T1 =	fiber strength, grams per tex (high = stronger fiber)		
E1 =	elongation, measure of fiber elasticity, (high = more elastic)		
Mr =	fiber maturity ratio		
Cm to FFB =	cm to first fruiting branch		
Seed/boll =	number of seeds per boll, handpicked samples		
Seed cotton/boll =	weight of seedcotton per boll, handpicked samples		
Lint/boll =	weight of lint per boll, handpicked samples		

Table 1	Table 1. Head to head comparisons of 05X494BR with DP 488 $060000000000000000000000000000000000$	head 	comp	arison	s of 05.	X494B CX924	R with	DP 488	BG/RR	# #													
			ļ	Lint ]	Lint Percent		Micronaire	Length	gth	Uniformity Ratio	cmity	Strength	igth	Elongation	tion	Plant Height	eight	Maturity		Seed Index	lex	Lint Index	dex
Reg- Year ion	Expt	City	City State		DP 488 BG/RR	05X494 BR	05X494 DP 488 05X494 DP 488 05X494 DP 488 BR BG/RR BR BG/RR BG/RR	05X494 BR		05X494 DP 488 BR BG/RR		05X494 BR	DP 488 (BG/RR	05X494 1 BR 1	DP 488 0 BG/RR	05X494 BR	DP 488 C BG/RR	05X494 DP BR BG	DP 488 053 BG/RR E	05X494 DI BR B(	DP 488 05 BG/RR	05X494 E BR B	DP 488 BG/RR
2003	1 32HV0135 HV	HV	SC	39.5	39.1	4.0	3.9	1.23	1.23	84.9	84.6	33.7	33.5	12.1	12.6								
2004	1  42HV0140 HV	AH (	SC	45.9	42.8	4.8	4.7	1.19	1.20	84.2	84.5	31.0	33.0	10.5	10.0								
2004 2	42BB0258	BB	GA	41.2	39.1	3.9	3.8	1.17	1.20	82.9	84.1	30.8	31.1	10.8	11.5	107.5	117.7						
2004 2	42TF0256	TE	GA	42.3	39.7	4.1	3.8	1.13	1.18	82.6	83.9	28.1	31.3	10.4	10.3	120.2	122.8	80.0	83.3				
2004 4	2004 4 42NE0428	Ë	LA	42.6	41.2	4.2	4.0	1.19	1.19	84.5	83.9	32.4	31.8	9.6	9.01	109.7	109.7		1	10.4	10.1	7.7	7.2
2004 4	4 42WI0427	ΣM	ΓĄ	44.9	43.3	4.6	4.5	1.13	1.13	82.6	81.5	28.5	29.2	9.01	10.5								
2004 4	4 44SM0443	$_{\rm SM}$	LA	43.1	41.8	4.7	4.5	1.18	1.18	84.1	85.0	30.2	31.3	9.5	10.2	126.8	114.7		),	10.1	10.3	7.6	7.4
Average				42.78	42.78 40.99	4.32	4.18	1.175	1.187	83.69 83.93		30.66 31.61	31.61	10.50 10.81		116.1   116.2	~	80.0 83	83.3 10	10.23   10.18	~	7.66	7.31
No. Comparisons	oarisons				7		7	7		7		7		7		4		-		- 7	-		
Difference	e			1	1.80	0.	0.14	-0.013	113	-0.24	7,2	-0.95	35	-0.31		-0.1		-3.3		0.05		0.35	
F ratio - 1	Fratio - Analysis of Variance	ariance		28	28.028	24.	24.995	2.772	72	0.487	87	3.564	54	2.507	17	0.001	11	n/a		0.047		13.914	4
Probablit	Probablity of difference - F test	e - F te	st	0.0	0.0018	0.0	0.0025	0.1470	170	0.5114	14	0.1080	080	0.1644	44	0.9786	98	n/a		0.8642	2	0.1667	7
				Values in	ı red are de	arived from	Values in red are derived from the Analysis of Variance routine in the EXCEL - ANALYSIS TOOL PAK add-in	is of Varian	nce routine	in the EX	CEL-AN	ALYSIS I	OOL PAK	add-in									
														***************************************		l				l			

											Seed			
		Lint							Cm to	Seeds	Cotton	Lint	Seed	Lint
Ent Xno		Percent	Mic	Len	Ur	I	E1	Mr	FFB	/boll	/boll	/poll	Index	Index
3 DP 555 BG/I	55 BG/RR	44.7	4.8	1.13	83	27.3	10.4	87.8	12.5	33.1	4.9	2.2	8.1	9'9
RO 4 11 05X494BR	194BR	43.1	4.7	1.18	84.1	30.2	95	0.88	13.9	30.7	5.4		10.1	2.0
12 DP 488 BG/R	88 BG/RR	41.8	4 ج	1.18	85.0	31.3	10.2	87.3	13:1	29.3	5.2	7.	10.3	7.
14 DP 4	55 BG/RR	43.3	4.1	1.15	83.9	30.3	10.0	87.0	10.8	32.2	5.1	2.2	9.0	6.9
15 DP 449 BG/I	49 BG/RR	40.5	4.7	1.15	84.2	31.2	6.6	88.0	11.0	31.4	5.1	2.1	9.7	9.9
Mean	u	42.0	4.8	1.18	85.6	30.8	11.8	87.3	10.4	32.2	5.9	2.5	10.5	7.7
Cv		1.4	2.8	1.6	8.0	3.1	4.5	0.7	22.3	7.5	6.3	6.4	3.5	3.7
Lsd .05	.05	0.7	0.2	0.02	8.0	1.1	9.0	0.7	2.9	2.8	0.4	0.2	9.0	0.3
No. 1	No. Reps	4	4	4	4	4	4	4	4	4	4	4	4	4
Heri	Heritability	0.98	0.00	0.88	69.0	06.0	0.87	0.70	0.49	0.62	0.81	0.85	0.95	0.94
R-sq	R-squared	0.93	0.75	0.72	0.44	0.76	06.0	0.78	0.30	0.36	0.58	99.0	0.87	0.85

က
<b>Table</b>
S.XIS-
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		Table 3. PVP Trial - Scott, MS - 2004 - Plant Map Summary	IS - 200	- Plant	Map Sun	ımary		
			Total	Nodes	Fruiting		NAWF	Date of
	Ent	Ent Variety	Nodes	to FFB	Branches	HNR	8-Jul	First Flower
	3	DP 555 BG/RR	24.5	6.3	18.2	2.08	9.1	3-Jul
OPCKESHBA	Ξ,	05X494BR	20.5	6.1	14.5	222	8.5	2-Jul
	12	DP 488 BG/RR	я 13	5.5	15.9	2.11	8.7	3-Jul
	14	DP 455 BG/RR	22.9	6.0	17.0	2.25	8.5	1-Jul
	15	DP 449 BG/RR	21.9	5.7	16.3	2.22	8.6	5-Jul
		Mean	21.8	5.9	16.0	2.21	8.4	3-Jul
-		LSD 0.05	1.5	0.5	1.4	0.14	0.7	NS
		Std. Error	0.5	0.2	0.5	0.05	0.2	1
-		ď	<.0001	<.0001	<.0001	<.0001	0.000	0.827
-		C.V.%	4.9	6.3	6.2	4.5	5.6	1.3
		Planted 4/29/2003				HNR = Heig	HNR = Height to Node Ratio	tio
						NAWF= No	NAWF= Node above white flower	e flower
		*****						

REPRODUCE LOCALLY. Include form number and date on all reproductions.

Form Approved - OMB No. 0581-0055

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U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY
PLANT VARIETY PROTECTION OFFICE
BELTSVILLE, MD 20705

EXHIBIT C (COTTON)

### OBJECTIVE DESCRIPTION OF VARIETY COTTON (Gossypium spp.)

ded. Charact Society or a s to be measu CATION: U	Use standard regional chec
ded. Charact Society or a s to be measu CATION: U	NUMBER  0500275  teristics described, including any recognized color fan maured.  Use standard regional check in Exhibit B.
ded. Charact Society or a s to be measu CATION: U	teristics described, including any recognized color fan manned.  Use standard regional check in Exhibit B.
Society or a sto be measu CATION: U	any recognized color fan ma nred. Use standard regional chec n Exhibit B.
ariety used ir	n Exhibit B.
riety 3	
	NT Disablands
ıl ıa	_NT_Blacklands _NT_San Joaquin
escription of	f the variety.
Variety 2	Comparison Variety 3
·	
-	

200500275

<b>Growth:</b> Determinate, Intermediate, Indeterminate	Intermediate	Intermediate		
Leaf Color: Greenish yellow, Light green, Medium green, Dark green	Dark gree	enDark green_		
Boll Shape: Length less than wid Length equal to width, Length more than width	•	Length>width		
<b>Boll Breadth:</b> Broadest at base, Broadest at middle	_Broadest at middle	Broadest at middle		
	on a given date before ha		·	
5. PLANT:				
Cm to 1st Fruiting Branch: (from cotyledonary node)	13.9	13.1		
No. of Nodes to 1st Fruiting Bran (excluding cotyledonary node)	nch: 6.1	5.5		
Mature Plant Height cm: (from cotyledonary node to termin	al)116.1	116.2		
*6. LEAF: Upper most, fully expa	anded leaf.			
Type: Normal, Sub Okra, Okra, Super Okra	Normal	Normal		
Pubescence: Absent, Sparse, Medium, Dense <u>OR</u> Trichomes/cn (Bottom surface excluding veins)	n <sup>2</sup> Sparse	Sparse		***************************************
Nectaries: Present or Absent	Present	Present		
*7. STEM PUBESCENCE: Glabrous, Intermediate, Hairy	Intermediate	Intermediate		
*8. GLANDS: (Gossypol) Absent,	Sparse, Normal, More Tl	han Normal		
Leaf:	Normal	Normal		
Stem:	Normal	Normal		
Calyx Lobe: (normal is absent)	Normal	Normal		
*9. FLOWER:				
Petals: Cream, Yellow	Cream	Cream		
Pollen: Cream, Yellow	Cream	Cream	-	

Petal Spot: Present, Absent	Absent	Absent	200500275
*10. SEED:			
Seed Index: (g/100 seed, fuzzy basis)	10.23	10.18	
Lint Index: (g lint/100 seeds)	7.66	7.31	
*11. BOLL:			
Lint Percent:X Picked Pulled	42.78	40,99	
OR			
Gin Turnout: Picked Stripped			
Number of Seeds per Boll	30.7	29.3	
Grams Seed Cotton per Boll	5.4	5.2	
Number of Locules per Boll	4-5	4-5	
<b>Boll Type:</b> (Stormproof, Storm Resistant, Open	n)Open	Open	
12. FIBER PROPERTIES:	All Alley Mayor and the second		
Specify Method (HVI or other):	HVI		
* Length: (inches, 2.5% SL)	1.175	1.187	
* Uniformity: (%)	83.69	83.93	
* Strength, T1 (g/tex)	30.66	31.61	·
* Elongation, E1 (%)	10.50	10.81	
* Micronaire:	4.32	4.18	
Fineness (Source)	NT	NT	
Yarn Tenacity: (cN/tex, 27 tex)	NT	NT	
Yarn Strength: (lbs. 22's)	NT	NT	
		= Moderately Susceptible, MR =	Moderately Resistant, R = Resistant)
· · · · · · · · · · · · · · · · · · ·	ria macrospora	<del></del>	Susarium Wilt
NTAnthra		NT	Phymatotrichum Root Rot
NTAscoch	yta Blight	NT	Pythium (specify species)
NTBacteria	al Blight (Race 1)	NT	Rhizoctonia solani

	NTBacterial Blight (Race 2)	NTSouthwestern Cotton Rust
	NTBacterial Blight (Race)	NTThielayiopsis basicola
13. DISEASE	ES: (continued)	200500275
	NTDiplodia Boll Rot	_NTVerticillium Wilt
i.	Other (specify)	
14. NEMATOR = Resistant)	ODES, INSECTS AND PESTS: (NT = Not Tested, S = Susc )	eptible, MS = Moderately Susceptible, MR = Moderately Resistant,
	_NTRoot-Knot Nematode	_NTReniform Nematode
	_NTBoll Weevil	_NTGrasshopper (specify species):
•	_NTBollworm	_NTLygus (specify species):
	_NTCotton Aphid	_NTPink Bollworm
	_NTCotton Fleahopper	_NTSpider Mite (specify species):
	_NTCotton Leafworm	_NTStink Bug (specify species):
	_NTCutworm (specify species):	_NTThrips (specify species):
	_NTFall Armyworm	_NTTobacco Bud Worm
19 -	Other (specify):	
15. COM distin	IMENTS: Present any additional information that canninguishes your variety.	ot adequately be described in 1 through 13 which significantly

05X494BR contains two proprietary genes, patented by the Monsanto Company and licensed to D&PL. One gene encodes a protein providing resistance to the herbicide glyphosate (ROUNDUP®), and the other gene encodes an active Bt endotoxin (BOLLGARD®).

REPRODUCE LOCALLY. Include form number and edition date on all	Il reproductions.	FORM APPROVED - OMB No. 0581-0055
U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE  EXHIBIT E	Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). The information is held confidential until the certificate is issued (7 U.S.C. 2426).	
STATEMENT OF THE BASIS OF OWNERSHIP		
1. NAME OF APPLICANT(S)  D&PL TECHNOLOGY HOLDING COMPANY, LLC.	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER  05X494BR  05X494BR  06CX924BR	
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country)	5. TELEPHONE (Include area code)	6. FAX (include area code)
P.O. Box 157 Scott, Mississippi 38772	(662) 742-4141 7. PVPO NUMBER	(662) 742-3182
	200500275	
8. Does the applicant own all rights to the variety? Mark an "X" in th	e appropriate block. If no, please expla	in. YES NO
9. Is the applicant (individual or company) a U.S. national or a U.S. b	pased company? If no, give name of c	ountry. YES NO
10. Is the applicant the original owner? X	NO If no, please answer <u>one</u>	of the following:
a. If the original rights to variety were owned by individual(s), is the property of the property of the property of the original rights to variety were owned by a company(ies)  YES  YES	NO If no, give name of count	ry sed company?
11. Additional explanation on ownership (If needed, use the reverse 05X494BR contains two proprietary genes, pater and licensed to D&PL. One gene encodes a prote and the other encodes an insect toxin.	nted by the Monsanto Compan	
PLEASE NOTE:		
Plant variety protection can only be afforded to the owners (not licens	sees) who meet the following criteria:	
If the rights to the variety are owned by the original breeder, that p national of a country which affords similar protection to nationals or		
<ol><li>If the rights to the variety are owned by the company which employ nationals of a UPOV member country, or owned by nationals of a genus and species.</li></ol>		
3. If the applicant is an owner who is not the original owner, both the	original owner and the applicant must n	neet one of the above criteria.
The original breeder/owner may be the individual or company who di Act for definitions.	irected the final breeding. See Section 4	41(a)(2) ot the Plant Variety Protection

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